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09/558,556	04/26/2000	Arturo A Rodriguez	A-5703	9533

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SCIENTIFIC-ATLANTA, INC.
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EXAMINER

LONSBERRY, HUNTER B

ART UNIT	PAPER NUMBER
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2623

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	03/26/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/26/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOmail@sciatl.com

Office Action Summary

Application No.

09/558,556

Applicant(s)

RODRIGUEZ ET AL.

Examiner

Hunter B. Lonsberry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21,25,28-30,32-34,36-38,41-43,45-52,54-62 and 65-69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21,25,28-30,32-34,36-38,41-43,45-52,54-62 and 65-69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 1/3/07 have been fully considered but they are not persuasive.

Applicant argues that the combination of Matthew and Tsinberg fails to teach receiving from a user, a request for program information related to at least one of the plurality of programs, and in response to the user request, suspending at the DHCT at least one of the plurality of tuners from tuning to the respective transmission channels (pages 16-18).

The Examiner disagrees. Matthews discloses that for a future program shown within the grid, upon selection of that entry by the user, the processor within the STB accesses a video stream provided by the server in order to present a preview to the user for the corresponding future program (figure 5, column 6, line 21-column 7, line 14).

In a similar system Tsinberg discloses tuning to a plurality of channels via a plurality of tuners (figure 3, tuner 1 and PIP tuner 8, column 5, lines 8-27) , and in response to receiving a request for programming information related to at least one of the plurality of programs, the DHCT is configured to suspends at least one of the plurality of tuners from tuning to the respective transmission channels and to utilize the suspended tuner for receiving at least a portion of the requested program information

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(column 5, line 57-column 6, line 51, tuner 8, in response to an updating EPG information request from the CPU to collect information related to the programs, a software decoder can display the images while the tuner tunes to another channel),, thus allowing a user to view high definition programming, and aide a user in making programming selections without interrupting the display of the video.

Therefore, Tsinberg, in combination with Matthews teaches each and every element of the claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 21, 25, 28-30, 32-34, 36-38, 41-43, 47-49, 50- 52, 54-62 and 66-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,815,145 to Matthews in view of U.S. Patent 6,212,680 to Tsinberg.

Regarding claim 21, Matthews discloses in figures 4 and 5, a method implemented by a digital home communication terminal (DHCT) for enabling a user to scroll through a plurality of video programs received via a plurality of transmission channels (column 3, lines 16-23, 55-62), comprising the steps of:

tuning to a first plurality of transmission channels via one or more respective tuners 62 (column 3, line 64-column 4, line 5, lines 44-55, column 9, lines 50-61),

receiving a first plurality of video programs including a first video program and a second video program via the first plurality of transmission channels (figure 4, column 5, lines 15-46, column 9, lines 56-61), wherein each of the first plurality of video programs comprises a plurality of time-sequential pictures (column 9, lines 56-61);

outputting the first plurality of video programs to a display device configured to simultaneously display the first plurality of video programs (column 9, lines 56-61), wherein a first video program is displayed in a first video display area (figure 4, left most area 104) of the display device and a second video program is displayed in a second video display area of the display device (figure 4, middle area 104);

receiving via a tuner a program guide data including program information related to the first video program and program information related to the second video program and program information related to a third video program (EPG data may found by tuning to a specific channel carrying the data, column 5, lines 52-62, column 6, lines 35-38, column 7, line 43-column 8, line 7);

outputting the program guide data to the display device simultaneously with the first plurality of video programs, wherein at least a portion of the program information related to the first video program is displayed at a location corresponding to the first video program and at least a portion of the program information related to the second video program is displayed at a location corresponding to the second video program

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(figure 4, EPG data corresponding to each program 104 is in location 106, column 4, lines 55-61)

Receiving from a user a request for program information related to one of the plurality of programs (user selection of a future program tile, figure 5, column 6, line 21-column 7, line 14).

Matthews fails to disclose tuning to a plurality of channels via a plurality of tuners, and in response to receiving a request for programming information related to at least one of the plurality of programs, the DHCT is configured to suspends at least one of the plurality of tuners from tuning to the respective transmission channels and to utilize the suspended tuner for receiving at least a portion of the requested program information.

Tsinberg discloses tuning to a plurality of channels via a plurality of tuners (figure 3, tuner 1 and PIP tuner 8, column 5, lines 8-27) , and in response to receiving a request for programming information related to at least one of the plurality of programs, the DHCT is configured to suspends at least one of the plurality of tuners from tuning to the respective transmission channels and to utilize the suspended tuner for receiving at least a portion of the requested program information (column 5, line 57-column 6, line 51, tuner 8, in response to an updating EPG information request from the CPU to collect information related to the programs, a software decoder can display the images while the tuner tunes to another channel)., thus allowing a user to view high definition programming, and aide a user in making programming selections without interrupting the display of the video.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Matthews to utilize the tuners, HD and software decoding features of Tsinberg, for the advantages of enabling a user to view high definition programming, and aide a user in making programming selections without interrupting the display of the video.

Regarding claim 25, Matthews discloses,

responsive to receiving the user input (column 10, lines 15-21) outputting to the display device program guide data that includes at least a portion of the program information related to the second video program and at least a portion of the program information related to the third video program, wherein the at least a portion of the program information related to the second video program is displayed at a location corresponding to the second video program and the at least a portion of the program information related to the third video program is displayed at a location corresponding to the third video program (figure 4, EPG data corresponding to each program 104 is in location 106, column 4, lines 55-61).

Regarding claims 28 and 58, Matthews discloses in figure 4, a number of images from programming, these images may be obtained via multiple tuners (column 9, lines 50-61). Matthews inherently scales down the resolution of the tiled programs in figure 4, as the use may select how many programs may be simultaneously displayed (column

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10, lines 47-63), thus a larger number of simultaneously displayed programs requires a lower display resolution for each program.

Regarding claim 29, Matthews shows in figure 4, a plurality of tiles 104, which are the same size and do not overlap one another.

Regarding claim 30, Matthews discloses that the first plurality of video programs may be outputted to the display device, by a user entering a video program guide, the user may enter a channel number to begin output of the program guide (column 5, lines 52-61).

Regarding claim 32, Matthews discloses a method for enabling the simultaneous viewing of video programs and related electronic program guide information (figures 4/5), comprising:

receiving a plurality of video programs substantially simultaneously by tuning to a plurality of transmission channels via a plurality of respective tuners (column 9, lines 50-61, figure 4), the plurality of video programs including a first video program and a second video program, wherein the first and second video programs each comprise a plurality of time-sequential pictures (each tile 104, column 9, lines 50-61);

receiving via a tuner a program guide data including program information related to the first video program and program information related to the second video program

(EPG data may found by tuning to a specific channel carrying the data, column 5, lines 52-62, column 6, lines 35-38, column 7, line 43-column 8, line 7);

receiving a first user input (user accessing the video program guide, figure 5, step 120); and

responsive to receiving the first user input outputting to a display device a television signal comprising of a simultaneous visual presentation of the plurality of video programs with program guide data, wherein the first and second video programs are located in respective first and second video display areas 104 of the visual presentation and the program guide data includes at least a portion of program information 106 related to the first video program and at least a portion of program information 106 related to the second video program (column 4, lines 55-61)

Receiving from a user a request for program information related to one of the plurality of programs (user selection of a future program tile, figure 5, column 6, line 21-column 7, line 14).

Matthews fails to disclose in response to receiving a request for programming information related to at least one of the plurality of programs, the DHCT is configured to suspends at least one of the plurality of tuners from tuning to the respective transmission channels and to utilize the suspended tuner for receiving at least a portion of the requested program information.

Tsinberg discloses tuning to a plurality of channels via a plurality of tuners (figure 3, tuner 1 and PIP tuner 8, column 5, lines 8-27) , and in response to receiving a request for programming information related to at least one of the plurality of programs,

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the DHCT is configured to suspends at least one of the plurality of tuners from tuning to the respective transmission channels and to utilize the suspended tuner for receiving at least a portion of the requested program information (column 5, line 57-column 6, line 51, tuner 8, in response to an updating EPG information request from the CPU to collect information related to the programs, a software decoder can display the images while the tuner tunes to another channel)., thus allowing a user to view high definition programming, and aide a user in making programming selections without interrupting the display of the video.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Matthews to utilize the tuners, HD and software decoding features of Tsinberg, for the advantages of enabling a user to view high definition programming, and aide a user in making programming selections without interrupting the display of the video.

Regarding claim 33, Mathews discloses receiving a second user input', and responsive to receiving the second the user input (column 10, lines 11-25, figure 6),

outputting to the display device a second plurality of video programs including a third video program and the second video program, wherein the second video program is displayed in the first video display area of the visual presentation and the third video program is displayed in the second video display area of the visual presentation (column 10, lines 11-25, figure 6),

outputting to the display device at least a portion of the program information 106 related to the second video program and at least a portion of the program information 106 related to the third video program (figure 4).

Regarding claim 34, Matthews discloses in figure 4, that the first program is displayed in a first area 104 and the second program is displayed in a second area 104, wherein at least a portion of the program information related to the first video program is displayed at a location corresponding to the first video program and at least a portion of the program information related to the second video program is displayed at a location corresponding to the second video program (figure 4, EPG data corresponding to each program 104 is in location 106, column 4, lines 55-61).

Regarding claim 36, Matthews discloses in figure 4, a number of images from programming, these images may be obtained via multiple tuners (column 9, lines 50-61), video processor subsystem 74, which is controlled by CPU 66, decompresses video signals and sizes and positions the video display windows (column 4, lines 22-26). Matthews inherently scales down the resolution of the tiled programs in figure 4, as the user may select how many programs may be simultaneously displayed (column 10, lines 47-63), thus a larger number of simultaneously displayed programs requires a lower display resolution for each program.

Regarding claim 37, Matthews shows in figure 4, a plurality of tiles 104, which are the same size and no not overlap one another.

Regarding claim 38, Matthews discloses that the first plurality of video programs may be outputted to the display device, by a user entering a video program guide, the use may enter a channel number to begin output of the program guide (column 5, lines 52-61).

Regarding claims 41, 43, and 54, Matthews discloses in figure 2, a digital home communication terminal (DHCT) configured to enable a user to scroll through a plurality of video programs received via a plurality of transmission channels, comprising:

- a plurality of tuners 62 (column 9, lines 51-61) configured to substantially simultaneously tune to a first plurality of transmission channels carrying a first plurality of video programs including a first video program and a second video program;

- memory 68 configured to store executable instructions (column 4, lines 9-11);
- and

- at least one processor 66 that is programmed by the executable instructions to enable the DHCT to output the first plurality of video programs to a display device configured to simultaneously display the first plurality of video programs (column 4, lines 9-18, 27-34, 44-55), wherein a first video program is displayed in a first video display area 104 of the display device and a second video program is displayed in a second video display area 104 of the display device (figure 4);

receiving via at least one tuner a program guide data including program information 106 related to the first video program and program information 106 related to the second video program (figure 4, EPG data may found by tuning to a specific channel carrying the data, column 5, lines 52-62, column 6, lines 35-38, column 7, line 43-column 8, line 7);

outputting the program guide data to the display device simultaneously with the first plurality of video programs, wherein at least a portion of the program information related to the first video program is displayed at a location corresponding to the first video program and at least a portion of the program information related to the second video program is displayed at location corresponding to the second video program (figure 4, program information 106 corresponds to each program 104); and

output, responsive to user input received by the DHCT, a second plurality of video programs including a third video program and the second video program to the display device (figure 6, column 10, lines 11-25),

wherein the second video program is displayed in the first video display area of the display device and the third video program is displayed in the second video display area of the display device (figure 6, column 10, lines 11-25)

Receiving from a user a request for program information related to one of the plurality of programs (user selection of a future program tile, figure 5, column 6, line 21-column 7, line 14).

Matthews fails to in response to receiving a request for programming information related to at least one of the plurality of programs, the DHCT is configured to suspends

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at least one of the plurality of tuners from tuning to the respective transmission channels and to utilize the suspended tuner for receiving at least a portion of the requested program information.

Tsinberg discloses tuning to a plurality of channels via a plurality of tuners (figure 3, tuner 1 and PIP tuner 8, column 5, lines 8-27) , and in response to receiving a request for programming information related to at least one of the plurality of programs, the DHCT is configured to suspends at least one of the plurality of tuners from tuning to the respective transmission channels and to utilize the suspended tuner for receiving at least a portion of the requested program information (column 5, line 57-column 6, line 51, tuner 8, in response to an updating EPG information request from the CPU to collect information related to the programs, a software decoder can display the images while the tuner tunes to another channel)., thus allowing a user to view high definition programming, and aide a user in making programming selections without interrupting the display of the video.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Matthews to utilize the tuners, HD and software decoding features of Tsinberg, for the advantages of enabling a user to view high definition programming, and aide a user in making programming selections without interrupting the display of the video.

Regarding claims 42 and 55, Matthews discloses in figures 4, and 6a/b, that a plurality of channels may be tuned to simultaneously, and may have a common channel displayed (column 10, lines 11-25), as when the user scrolls to the left, the left most channel moves to the middle, and the left most tile is replaced by a new program channel, additionally program information 106 is displayed for each corresponding program 104.

Regarding claim 45, Matthews shows in figure 4, that EPG data corresponding to each program 104 is in location 106 (column 4, lines 55-61).

Regarding claims 47 and 57, Matthews discloses that EPG data for the programs is stored in memory 68 (column 6, lines 34-38).

Regarding claim 48, Matthews discloses a method implemented by a digital home communication terminal (DHCT) having a plurality of tuners (column 9, lines 51-61), comprising the steps of:

- receiving a first video program via a first tuner (figure 4, column 9, lines 51-61);
- receiving a second video program via a second tuner (column 9, lines 51-61),
- receiving via at least one tuner a program guide data including program information related to the first video program and program information related to the second video program (figure 4, EPG data 106 may found by tuning to a specific

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channel carrying the data, column 5, lines 52-62, column 6, lines 35-38, column 7, line 43-column 8, line 7);

receiving user input (figure 5, step 120),

outputting the first and second video programs to a display device responsive to receiving the user input (figure 4, column 6, lines 10-17); and

outputting at least a portion of program information related to the first and second video programs to the display device responsive to receiving the user input (column 4, lines 56-61);

wherein the first and second video programs 104 and the program guide data 106 are displayed simultaneously by the display device (figure 4),

Receiving from a user a request for program information related to one of the plurality of programs (user selection of a future program tile, figure 5, column 6, line 21-column 7, line 14).

Matthews fails to disclose in response to receiving a request for programming information related to at least one of the plurality of programs, the DHCT is configured to suspends at least one of the plurality of tuners from tuning to the respective transmission channels and to utilize the suspended tuner for receiving at least a portion of the requested program information.

Tsinberg discloses tuning to a plurality of channels via a plurality of tuners (figure 3, tuner 1 and PIP tuner 8, column 5, lines 8-27) , and in response to receiving a request for programming information related to at least one of the plurality of programs, the DHCT is configured to suspends at least one of the plurality of tuners from tuning to

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the respective transmission channels and to utilize the suspended tuner for receiving at least a portion of the requested program information (column 5, line 57-column 6, line 51, tuner 8, in response to an updating EPG information request from the CPU to collect information related to the programs, a software decoder can display the images while the tuner tunes to another channel)., thus allowing a user to view high definition programming, and aide a user in making programming selections without interrupting the display of the video.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Matthews to utilize the tuners, HD and software decoding features of Tsinberg, for the advantages of enabling a user to view high definition programming, and aide a user in making programming selections without interrupting the display of the video.

Regarding claims 49 and 56, Matthews discloses in figure 2, that there is an analog tuner 62a and digital tuner 62b, and that programs may be analog or digital (column 3, lines 19-24).

Regarding claim 50, Matthews discloses the use of a third tuner 62c.

Matthews fails to disclose receiving program guide data prior to receiving the user input.

Tsinberg discloses the use of a PIP tuner 8, which under the control of the CPU tunes to a number of other channels to retrieve EPG information prior to receiving any

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user input (column 5, line 57-column 6, line 51) to ensure that the EPG has the most up to date information.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Matthews to utilize the pretuning/EPG fetching features of Tsinberg to ensure that a user receives the most up to date program information to aide the user in selecting a program to view.

Regarding claim 51, Matthews shows in figure 4, a first second and third program 104, each with program information 106.

Regarding claim 52, Matthews discloses that the first and second programs may be outputted at the display device, by a plurality of tuners, which tune and render the displayed channels (column 9, lines 56-61).

Regarding claim 59, Matthews discloses in figure 2, a DHCT configured to provide a user with program information corresponding to future television programs comprising:

at least one tuner 62 configured to receive a program guide data (EPG data may found by tuning to a specific channel carrying the data, column 5, lines 52-62, column 6, lines 35-38, column 7, line 43-column 8, line 7) including program information corresponding to a plurality of television programs scheduled on the first television channel (column 9, lines 26-31, 40-61)

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at least one tuner configured to receive a plurality of television programs wherein at least one of the TV programs in the plurality corresponds to a television program to be broadcast in the future on a first television channel (column 9, lines 26-31, 40-61);

a first memory 68 configured to store executable instructions (column 4, lines 9-11); and

at least one processor 66 that is programmed by the executable instructions (column 4, lines 9-34) to enable the DHCT to output a television signal comprising a simultaneous visual presentation of the plurality of television programs and program guide data (figure 4), wherein at least a portion of the program information 106 corresponding to each respective television program 104 in the plurality of sequential television programs is included in the visual presentation

Receiving from a user a request for program information related to one of the plurality of programs (user selection of a future program tile, figure 5, column 6, line 21-column 7, line 14).

Matthews fails to disclose a plurality of program tuners and in response to receiving a request for programming information related to at least one of the plurality of programs, the DHCT is configured to suspends at least one of the plurality of tuners from tuning to the respective transmission channels and to utilize the suspended tuner for receiving at least a portion of the requested program information.

Tsinberg discloses tuning to a plurality of channels via a plurality of tuners (figure 3, tuner 1 and PIP tuner 8, column 5, lines 8-27) , and in response to receiving a request for programming information related to at least one of the plurality of programs,

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the DHCT is configured to suspend at least one of the plurality of tuners from tuning to the respective transmission channels and to utilize the suspended tuner for receiving at least a portion of the requested program information (column 5, line 57-column 6, line 51, tuner 8, in response to an updating EPG information request from the CPU to collect information related to the programs, a software decoder can display the images while the tuner tunes to another channel)., thus allowing a user to view high definition programming, and aide a user in making programming selections without interrupting the display of the video.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Matthews to utilize the tuners, HD and software decoding features of Tsinberg, for the advantages of enabling a user to view high definition programming, and aide a user in making programming selections without interrupting the display of the video.

Regarding claim 60, Matthews discloses in figure 4, that at least one picture and program information corresponds to each respective TV program are co located in a respective display area of the visual presentation (Figure 4, column 4, lines 44-61).

Regarding claim 61, Matthews discloses a method for enabling the simultaneous viewing of video programs and related electronic program guide information (figures 4/5), comprising:

receiving a plurality of video programs substantially simultaneously by tuning to a plurality of transmission channels via a plurality of respective tuners (column 9, lines 50-61, figure 4), the plurality of video programs including a first video program and a second video program, wherein the first and second video programs each comprise a plurality of time-sequential pictures (each tile 104, column 9, lines 50-61);

receiving via a tuner a program guide data including program information related to the first video program and program information related to the second video program (EPG data may found by tuning to a specific channel carrying the data, column 5, lines 52-62, column 6, lines 35-38, column 7, line 43-column 8, line 7);

configuring a memory to output the first plurality of video programs (column 4, lines 21-34, video processor subsystem 74 must include a memory, as memory is required to decompress a digital video signal);

configuring an output buffer in the memory with the first video program and the second video program (column 4, lines 21-34, video processor subsystem 74 must include a memory, as memory is required to decompress a digital video signal, and Matthews also discloses that multiple tuners may be utilized in order to display several channels simultaneously, column 9, lines 56-61);

configuring the output buffer with a plurality of program information 106 sections including a first program information section for at least a portion of the program information related to the first video program and a second program information section for at least a portion of the program information related to the second video program

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(Figure 4, column 4, lines 21-34, Matthews discloses that video processor 74 and mixer 76 may combine locally generated graphics with a received video signal);

configuring the location of the video section and program information section in the output buffer for each respective video program (Figure 4, column 4, lines 21-34, Matthews discloses that video processor 74 and mixer 76 may combine locally generated graphics with a received video signal);

outputting the output buffer to a display device (column 4, lines 18-21),

Receiving from a user a request for program information related to one of the plurality of programs (user selection of a future program tile, figure 5, column 6, line 21-column 7, line 14).

Matthews fails to disclose in response to receiving a request for programming information related to at least one of the plurality of programs, the DHCT is configured to suspends at least one of the plurality of tuners from tuning to the respective transmission channels and to utilize the suspended tuner for receiving at least a portion of the requested program information.

Tsinberg discloses tuning to a plurality of channels via a plurality of tuners (figure 3, tuner 1 and PIP tuner 8, column 5, lines 8-27) , and in response to receiving a request for programming information related to at least one of the plurality of programs, the DHCT is configured to suspends at least one of the plurality of tuners from tuning to the respective transmission channels and to utilize the suspended tuner for receiving at least a portion of the requested program information (column 5, line 57-column 6, line 51, tuner 8, in response to an updating EPG information request from the CPU to collect

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information related to the programs, a software decoder can display the images while the tuner tunes to another channel), thus allowing a user to view high definition programming, and aide a user in making programming selections without interrupting the display of the video.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Matthews to utilize the tuners, HD and software decoding features of Tsingberg, for the advantages of enabling a user to view high definition programming, and aide a user in making programming selections without interrupting the display of the video.

Regarding claim 62, Matthews discloses in figures 4 and 6 a/b, that a user may scroll leftwards to view additional programs, the left most program moves to the center and a new program takes its place in the left most spot with corresponding information 106 being displayed in the proper frame (column 10, lines 11-25), memory stores the incoming digital programs prior to display (Figure 4, column 4, lines 21-34, video processor 74 resizes the incoming video).

Regarding claim 66-68, Matthews discloses that the plurality of time sequential pictures correspond to the visual content of a program currently displayed on a first channel (column 5, lines 24-46, column 9, lines 50-61).

Regarding claim 69, Matthews discloses that the picture may correspond to a future program (column 9, lines 26-31, 40-61).

3. Claim 65 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,815,145 to Matthews in view of U.S. Patent 6,212,680 to Tsinberg in further view of U.S. Patent 6,177,931 to Alexander.

Regarding claim 65, Matthews discloses in figure 4, a video program guide.

The combination of Matthews and Tsinberg fails to disclose displaying a broadcast starting time for a corresponding program.

Alexander discloses in figure 3, an electronic program guide in which a broadcast starting time (9:00pm) is displayed for a corresponding program (Remember Wenn), which aides a user in selecting a program to watch.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify the combination of Matthews and Tsinberg to display program start times as taught by Alexander, thus aiding a user when selecting a program to watch.

4. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,815,145 to Matthews in view of U.S. Patent 6,212,680 to Tsinberg in further view of U.S. Patent, 4,809,069 to Meyer.

Regarding claim 46, Matthews discloses in figure 4, a number of tiled video windows.

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The combination of Matthews and Tsinberg fails to disclose displaying a video program displayed in the background of a first and second video program.

Meyer discloses in Figure 11, a system in which multiple PIP windows are generated and displayed over background video (column 7, line 19-59), thus enabling a user to keep track of the original program while browsing other programs.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify the combination of Matthews and Tsinberg to utilize the overlaid video of Meyer, thus enabling a user to keep track of the original program while browsing other programs.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hunter B. Lonsberry whose telephone number is 571-272-7298. The examiner can normally be reached on Monday-Friday during normal business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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HBL



Hunter B. Laasberry
Patent Examiner
Art Unit 2623